

Creating Moon Craters

Station materials:

- Plastic Dish Pans (4)
- Flour
- Cinnamon
- Rocks (6)

Station set-up:

- Place about an inch of flour in each pie pan, sprinkle the surface with cinnamon
- Place the rocks in small piles around the table

Guiding the learning:

- Explain to the students that craters in the moon were formed when object crashed into the surface in the moon as it was forming
- Instruct the students to drop in the rocks and observe the pattern it makes
- Ask students how the impact pattern will change if the rock is dropped from a higher position, allow them to investigate
- Ask students how the impact pattern will change if they drop a larger rock, allow them to investigate
- Gently shake the pan from side to side to reset for the next group
- Dispose of the flour at the end
- Please wipe off the marbles, pans and rocks before packing up

Science Talking Points:

- When the moon was first forming meteorites, and other large rocks hit the surface of the moon and formed craters. The “rays” of darkness that we see when we look at the moon are a result of the “splashing” from these impacts. The size of the crater is dependent upon the size of the object and the speed at which it impacted the moon.